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# Medicinal Plants And Their Ecobiological Properties

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**ABSTRACT** 

In this article, today's traditional medicine (folk medicine) is the wisdom of the people. It is a complex of very rich and huge experience and knowledge. It is a new, effective scientific medicine is an inexhaustible source of enrichment with medicinal preparations. The value of folk medicine in this field, its role is priceless.

### **Keywords:**

anthocyanins, tannin, alkaloids, glucosides, bitter substances, coumarins, organic acids, phytoncides, starch, polysaccharides, nitrogenous substances, proteins, vitamins, essential oils, oil and butter acids.

#### Introduction

247 species belonging to 70 families of 17,500 species of high-spored and flowering plants found in the flora of the CIS countries are used in medicine. Currently, due to the development of abandoned, gray and desert lands, the species and wealth of wild medicinal plants are decreasing. In addition, the productivity of natural resources of medicinal plants is often unstable, depending on the annual weather conditions. Due to this, 50 types of medicinal plants are being cultivated.

## **Literature Analysis And Methodology**

According to the information of S.S. Sahobiddinov, 413 types of medicinal plants are used in folk medicine to treat various diseases in Central Asian flora. According to H. H. Dolmatov and Z. Holmatov and Z. Habibov, 577 types of medicinal plants have been identified in the flora of our republic. , depends on the effectiveness of the effect on bacteria and viruses. Medicines made from medicinal plants, depending on the nature of their effect on the body, calm, sleep, relieve pain, stop bleeding, numb, stimulate They are divided into groups such as anti-inflammatory, anti-inflammatory,

anti-inflammatory, anti-inflammatory, and anti-inflammatory. Chlorophyll is a green pigment found in the green parts of plant organs. This substance is divided into chlorophyll "A" and chlorophyll "B". Chlorophyll does not break down in water, but does break down in oil [1].

The word flavonoids means yellow. They are natural complex compounds and are considered to be benzo-U pyrone products, whose basis is phenyl-propane. Flavonoids, in turn, are divided into groups such as flavone, flavonoid. flavonol. catechin. antonian. Anthocyanins give the appearance of purple to purple paint. Anthocyanins are considered flavone glucosides and are hydrolyzed and aglycondecomposed into sugar and anthocyanidins. They, in turn, are divided into kerasianin, enin and betanin, Anthocyanins are highly soluble in water. If it is heated or boiled, it quickly deteriorates, that is, it loses its color and properties. Anthocyanins are abundant in flowers, fruits and seeds of plants.

Medicines made from quercetin and rutin substances are used more often in medicine. They are used against diseases such as heart and blood vessels, bleeding, stomach ulcers, and high blood pressure. Tanid accumulates in the

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leaves, fruits, bark, roots and nodules of some plants. This substance is found dissolved in plant cell sap. It is combined with other substances or in some cases. After the plant tissue dies, it is absorbed into the cell walls. Tanid is the main raw material for the leather industry. This substance is used in medicine as a bactericidal substance to prevent gastrointestinal diseases. Alkaloids are substances composed of very complex organic compounds with nitrogen-storing and alkaline properties that accumulate in various organs of plants.

## **Results And Discuussion**

These substances have their own physiological effects. Various drugs such as papaverine, quinine, codeine are produced from alkaloids. They are widely used in medicine for the treatment of various diseases. Glucosides are stored in all body parts of plants, fruits and roots. They are split into two under the influence of moisture and enzymes. As a result, it is divided into sugar glucoside and sugarless (aglycon) components. Glucosides are divided into bitter, saponincontaining glucosides and anthraglucosides, which affect the cardiovascular system, depending on the nature of their effect on the human body. Unlike other substances that affect the cardiovascular system, glucosides directly affect the heart. Bitter glucosides increase the appetite of the gastrointestinal tract, open the and improve digestion. appetite substances (nitrogen-free compounds) are composed of terpene compounds and have a bitter taste. Under the influence of these substances, a lot of gastric juice is produced, food is better digested, and appetite is increased. It is especially important for patients with this disease. Coumarins are biologically active substances that accumulate in plant organs, especially umbels. These substances are composed of cisorthooxycortic acids [2].

The effectiveness of coumarins is different, and furocoumarins are the most commonly used in medicine. These substances increase the body's sensitivity to ultraviolet rays, dilate blood vessels.

Furocoumarins are the main raw materials for the production of drugs widely used in the

treatment of skin diseases. Organic acids are found in plant cell sap. In all organs of the plant, especially in its fruits, there are apple, lemon, wine, savior, ant, ascorbic, sometimes quinic and linolenic acids. Organic acids actively participate in the metabolism of substances in the body. Increases the efficiency of the glands that produce sap. It affects the secretion of bile and pancreatic juice. Organic acids have bactericidal properties. Because of this, it destroys various microbes. As a result, the transmission of diseases to the human body is prevented. Organic acids stimulate appetite and improve digestion. Enzymes are produced in plant tissues. They accumulate more in fruits and actively participate in the process of metabolism. Enzymes are made almost entirely of proteins. Chemical reactions occurring in the body take place with the participation of enzymes. Enzymes also play the role of catalysts in accelerating the reaction of certain substances. The temperature affecting the enzymes should not be higher than 40°C. If the temperature is higher than this indicator, the proteins in the enzymes will coagulate, as a result, the enzymes will lose their catalytic properties [3].

Phytoncides are organic substances with a complex structure that accumulate in plant organs and destroy microorganisms. These substances are called plant antibiotics or phytoncides. Phytoncides can be in the form of alkaloid, essential oil, anthocyanin. Some phytoncides were isolated from plants. For example, allicin phytoncide is extracted from garlic and consists of allin amino acids. It has bactericidal properties. **Phytoncides** kill bacteria and prevent their growth reproduction. Phytoncides obtained from plants are used as antibiotics in medicine. It is especially used in the treatment of infectious diseases. Starch belongs to polysaccharides and has a complex structure. It refreshes the body and increases its strength. Glucose is formed from it in a living organism. Medicines are prepared from starch, which are used in the treatment of gastrointestinal and skin diseases. Also, starch is widely used in industry and household work. Polysaccharides are abundant in all organs of plants, especially in fruits, roots Volume 34 | July 2024 ISSN: 2795-7624

and bulbs. Polysaccharides have a complex structure and are made up of carbohydrates. They are one of the substances necessary for daily needs. Nitrogen substances are composed of complex compounds, the basis of which is protein substances. They, in turn, consist of amino acids and amides.

Proteins are mostly collected in seeds and fruits of plants. They are a source of nutritious food. Proteins are broken down into amino acids under the influence of proteolytic enzymes, participate in proper metabolism of the body and increase its strength. Vitamins are formed from complex organic compounds and are present in all organs of plants. Vitamins are very resistant to the effects of the external environment, quickly deteriorate, disintegrate and lose their useful properties. For example, S. R. V1 V2, RR, N and pathogenic vitamins quickly decompose in boiling water and lose their healing properties. Vitamins A, Q, D, E do not break down or break down quickly in boiling water, but they break down in fats and lose their properties. Vitamins C, A, B are destroyed by oxygen. Vitamin V2 is more resistant to the effects, the vitamin is considered one of the permanent and necessary components for human tissues and takes an active part in the process of metabolism [4].

#### Conclusion

Among the drugs used in the treatment of various diseases that occur in the human and animal body, drugs prepared from medicinal plants occupy a significant place. Many medicinal plants are not sold in pharmacies, but are considered the main source of raw materials for the production of medicines. For example: Cardiovalen is one of the high-quality drugs used in the treatment of heart diseases, and it is a complex compound made from hawthorn, valerian, adonis and several other types of plants. Currently, one third of the more than 900 different medicines used in medicine are products of medicinal plants. 77% of the drugs used in the treatment of heart diseases, 74% of the drugs used to treat diseases of the liver and gastrointestinal tract, and 80% of the drugs used against uterine diseases are made from medicinal plants [5].

#### References

- Karimov V., Shomahmudov A. Xalq tabobati va zamonaviy ilmi tibda qo'llaniladigan shifobaxsh o'simliklar. — Toshkent 1993.
- 2. Uzoqjonova, M. (2024). EKOLOGIK MA'DANIYATNI YOSHLAR ONGIGA PEDAGOGIK METODLAR YORDAMIDA SINGDIRISH. Universal Xalqaro Ilmiy Jurnal, 1(4), 99–100. Retrieved from https://universaljurnal.uz/index.php/jurnal/article/view/72.
- 3. Uzokjonova, M. (2023). STEAM technology and the importance of gamification in it. Science and Education, 4(10), 365–368. Retrieved from <a href="https://www.openscience.uz/index.php/sciedu/article/view/6361">https://www.openscience.uz/index.php/sciedu/article/view/6361</a>.
- 4. Madaminjonovna M. M. et al. ECOLOGICAL-VALEOLOGICAL CULTURE IN THE" MAN-NATURE-SOCIETY" SYSTEM //Web of Teachers: Inderscience Research. 2024. T. 2. № 5. C. 51-55.
- 5. Uzoqjonova, M. (2023). Tabiiy fanlarni o'qitishda STEAM ta'limi tizimi. Science and Education, 4(9), 344–347. Retrieved from
  - https://www.openscience.uz/index.php/sciedu/article/view/6297.